

REMARKS

Claims 2-10 are pending. Claims 6 and 10 have been amended. No new matter has been introduced. Applicants have filed a Request for Continued Examination (RCE) herewith. Reexamination and reconsideration of this application are respectfully requested.

In the November 6, 2006 Office Action, the Examiner objected to claim 6 and rejected claims 2-10. Claim 6 was objected to under 37 C.F.R. 1.75(c) as being an improper independent claim. Claims 2, 3, 5-8, and 10 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Application Publication No. 2003/0063715 to Peplinski (“Peplinski”). Claim 4 was rejected under 35 U.S.C. §103(a) as being obvious given Peplinski. Claim 9 was rejected under 35 U.S.C. §103(a) as being obvious given Peplinski in view of U.S. Patent No. 5,844,328 to Furst (“Furst”). These rejections are respectfully traversed.

37 C.F.R. 1.75(c) – claim 6

Claim 6 was objected to under 37 C.F.R. 1.75(c) as being an improper independent claim. Specifically, the Examiner alleged that the limitation “limits the current to an amount *less than a maximum amount*” was improper because it did not further limit the scope of claim 5, the claim from which it depends. [Emphasis in original.] Applicants have amended the limitation at issue to recite “limits the current to an amount less than a *predetermined* maximum amount” and respectfully submit that the Examiner’s objection is obviated.

35 U.S.C. §102(e) rejection – claims 2, 3, 5-8, and 10

Claims 2, 3, 5-8, and 10 were rejected under 35 U.S.C. §102(e) as being anticipated by Peplinski. Presently, claim 10 is the independent claim from which claims 2-9 depend. The Examiner stated that Peplinski discloses a battery backup apparatus for use with a barrier movement operator comprising: (a) a DC voltage supply; a DC power connection from the DC voltage supply to a barrier movement control; (c) a battery having a first and second terminals; (d) a first conduction path and second conduction path; (e) a battery charging circuit; and (f) a unidirectional isolation device (figure 6a, item D1; page 4, paragraph 42,

lines 3-5) connecting DC voltage from the first batter terminal to the DC voltage supply via the first conduction path (figure 6a). [Office Action, Pp. 4-5.]

Independent claim 10 recites (with emphasis added):

“10. A battery backup apparatus for use with a barrier movement operator comprising:
a DC voltage supply;
a DC power connection from the DC voltage supply to a barrier movement control;
a battery having first and second terminals;
a first conduction path and second conduction path connected to the DC voltage supply;
a battery charging circuit for receiving a DC voltage from the DC voltage supply via the first conduction path and the second conduction path and for charging the battery when the input DC voltage exceeds a predetermined voltage; and
a third conduction path comprising a unidirectional isolation device connecting DC voltage from the first battery terminal to the DC voltage supply via the first conduction path.”

Peplinski discloses a movable barrier operator with a backup battery monitoring and notification device. Peplinski discloses use of a diode, D1, which prevents a battery B1 from backfeeding through regulator 220. [Para. 42] Peplinski also discloses that certain switches must be opened and others must be closed when switching from charging a backup battery to using the backup battery to power a garage door. Specifically, Peplinski discloses:

“The charging of batteries and the supplying of battery back-up power are controlled by switches S1, S2, S3, and S4, as shown in FIG. 6. During ordinary operation of the garage door operator (no external power failure), the batteries B1 and B2 are connected to the battery chargers 210 and 212 to allow charging. More specifically, switches S2 and S4 are closed to connect the batteries B1 and B2 to the battery chargers 210 and 212. **In addition, during ordinary operation, the batteries B1 and B2 do not supply back-up power to the garage door operator components.** Thus, switches S1 and S3 are open so that the batteries B1 and B2 are not connected to the garage door operator components and are not connected in series to each other.

When the garage door operator experiences a loss of external power, this loss of power cycles relays K1, K2, K3, and K4 to operate the corresponding switches S1, S2, S3, and S4. First, the batteries B1 and B2 are disconnected from the battery chargers 210 and 212. More specifically, switches S2 and S4 are switched to the open position to disconnect batteries B1 and B2 from their respective battery chargers 210 and 212. Second, back-up power is supplied to the garage door operator components. More specifically, switch S1 is closed to connect the batteries B1 and B2 to the

garage door operator components and switch S3 is closed to connect the batteries B1 and B2 to each other so that they operate in series. The use of this switching technique prevents significant dissipation of power.”

[Peplinski, Pp. 37-38; emphasis added.]

Claim 10 recites a backup battery apparatus having *a third conduction path comprising a unidirectional isolation device connecting DC voltage from the first battery terminal to the DC voltage supply via the first conduction path*. This arrangement differs from the teachings of Peplinski. Specifically, Peplinski teaches that switches S2 and S4 are initially connected to the battery charging circuits to allow charging of the batteries. When a power failure occurs (i.e., power supply voltage becomes less than that of the batteries), switches S2 and S4 are opened and switches S1 and S3 are closed by the relays K1, K2, K3, and K4. Thus, no power can flow from the batteries back to the charging circuits. Accordingly, Peplinski teaches away from the backup battery apparatus recited in claim 10 and teaches that “*during ordinary operation, the batteries B1 and B2 do not supply back-up power to the garage door operator components.*”

By use of a third conduction path having a unidirectional isolation device to connect DC voltage from the first battery terminal to the DC voltage supply, the backup battery apparatus recited in claim 10 can be utilized to quickly and automatically connect the DC voltage from the first battery terminal to the DC voltage supply in the event of a power disruption. This is opposite to that taught by Peplinski.

Accordingly, claim 10 distinguishes over Peplinski. Claims 2-9 each depend, directly or indirectly (i.e., through claim dependencies), from claim 10 and therefore also distinguish over Peplinski for at least the same reasons as those discussed above with respect to claim 10. Therefore, applicants respectfully submit that the rejection of claims 2, 3, 5-8, and 10 under 35 U.S.C. §102(e) should be withdrawn.

35 U.S.C. §103(a) rejection – claim 4

Claim 4 was rejected under 35 U.S.C. §103(a) as being obvious given Peplinski. The Examiner stated the following:

“Peplinski discloses the battery backup apparatus of claim 10, as discussed above, and further discloses one or more visual signaling devices (page 3, paragraphs

32-33). Peplinski discloses that the battery backup apparatus can connect to the Internet and transmit fax messages to inform the user of system conditions.”

[Office Action, P. 7.]

Applicants note the claim 4 distinguishes over Peplinski, as discussed above with respect to the 35 U.S.C. §102(e) rejection of claim 1. Although the Examiner rejected claim 4 as being obvious, no reference other than Peplinski was discussed by the Examiner in the Office Action. Accordingly, applicants respectfully submit that the rejection of claim 4 under 35 U.S.C. §103(a) should be withdrawn.

35 U.S.C. §103(a) rejection – claim 9

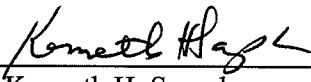
Claim 9 was rejected under 35 U.S.C. §103(a) as being obvious given Peplinski in view of Furst. The Examiner stated that with respect to claim 9, Peplinski disclose the battery back up apparatus of claim 10. The Examiner also stated that Peplinski does not disclose circuitry for selectively disconnecting the first battery terminal from the first backup port when the first backup port is disconnected from the input DC voltage. However, the Examiner stated that this limitation was taught by Furst and that it would have been obvious to a person of ordinary skill in the art at the time of the invention to combine the teachings of Peplinski and Furst in the direction of claim 9.

As discussed above, claim 9 distinguishes over Peplinski for at least the same reasons as those discussed above with respect to claim 1. Furst does not make up for the deficiencies of Peplinski. Specifically, Furst discloses a backup device for an electric appliance that includes a switch 72 that allows a battery 12 to be disconnected from an appliance 20. However, Peplinski in combination with Furst does not disclose, teach, or suggest use *a third conduction path comprising a unidirectional isolation device connecting DC voltage from the first battery terminal to the DC voltage supply via the first conduction path.*

Accordingly, claim 9 distinguishes over Peplinski in combination with Furst. Therefore, applicants respectfully submit that the rejection of claim 9 under 35 U.S.C. §103(a) should be withdrawn.

Applicants believe that the foregoing amendments place the application in condition for allowance, and a favorable action is respectfully requested. If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Chicago telephone number (312) 577-7000 to discuss the steps necessary for placing the application in condition for allowance should the Examiner believe that such a telephone conference would advance prosecution of the application.

Respectfully submitted,

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